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REMARKS

Claims 4-7 and 15-18 are pending in the application. Favorable reconsideration of the application is respectfully requested.

I. REJECTION OF CLAIMS 4 AND 15 UNDER 35 USC §103(a)

Claims 4 and 15 stand rejected under 35 USC §103(a) based on *Applicants' Admitted Prior Art (AAPA)* in view of *Lin* (U.S. Patent No. 6,057,789) in further view of *Fertner* (U.S. Patent No. 5,742,642) and *Tice* (U.S. Patent No. 6,222,456). This rejection is respectfully traversed for at least the following reasons.

Independent claim 4 recites a network receiver for recovering a frame of data transmitted at a first data rate on a network medium. The network receiver includes a receiver circuit and a buffer circuit. The receiver circuit utilizes a training portion of a data frame for calculating receiver parameters useful for recovering data from a subsequent data portion of the data frame. The buffer circuit *stores a portion of the data frame at a first data rate and releases the portion to the receiver circuit at a second data rate, wherein the buffer circuit releases samples at a slower sampling rate during a training sequence of the frame data and releases samples at the first data rate during a data portion of the frame data*. Thus, the buffer circuit of claim 4 stores data at a first data rate, but releases data at two different rates depending on whether a training sequence is executed or a data sequence is executed. Claim 15 similarly recites releasing sample values during a training sequence at a data rate slower than the rate at which sample values are released during a data portion of the frame of data. The cited art, whether taken alone or in combination, does not teach or suggest such operation.

The Examiner states that the *AAPA* in view of *Lin* in further view of *Fertner* does not disclose varying the sampling rate depending on the training sequence of the frame or the data portion of the frame. The Examiner contends, however, that *Tice* discloses this feature, and that it would have been obvious to modify *AAPA*, *Lin* and *Fertner* to

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arrive at the claimed invention.[1] The Applicant respectfully disagrees with the Examiner for at least the following reasons.

Initially, Applicant notes that it appears the Examiner has interpreted the above italicized portion of claim 4 (and the corresponding portion of claim 15) as a variable sample circuit. Nowhere, however, do claims 4 and 15 recite a variable sample circuit. Instead, claims 4 and 15 recite a device/method wherein a buffer circuit stores a portion of the data frame at a first data rate and releases the portion to the receiver circuit at a second data rate. Thus, the buffer circuit stores data at one rate, and releases data at another rate.

Moreover, and with reference to Fig. 2 of the present application (reproduced at right) it is disclosed that the sample management buffer 36 includes a sample buffer 37 for storing samples representing the baseband I channel and Q channel signals at the 4 MHz sample frequency.[2] Additionally, the specification discloses that the sample management buffer 36 also includes a sample release circuit 38. The sample release circuit operates to release the samples from the sample buffer 37 at a slower sample rate.[3] Thus, the sample management buffer 36 includes two circuits, one to store data and one to release data. Moreover, the sample release circuit 38 releases the data at several different rates. Variable sampling of the data, while possible, is not an aspect of the present invention, nor is it recited in independent claims 4 and 15.

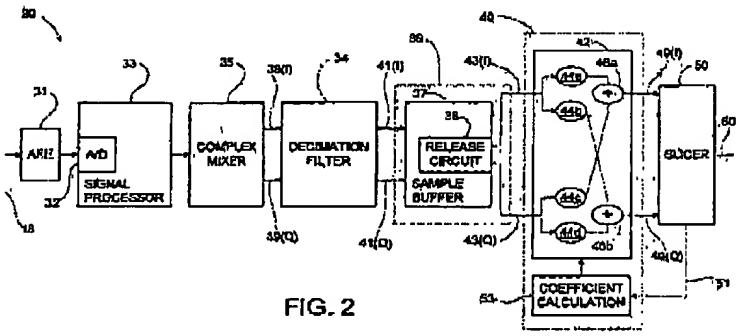

FIG. 2

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[1] Page 4 of the present Office Action

[2] Page 7, lines 21-24 of the specification

[3] Page 7, lines 24-26 of the specification

Tice discloses a detector with a variable sample rate. More specifically, *Tice* relates to a smoke detector that includes a profile detection circuit that analyzes the output of a sensor to establish the presence of a possible alarm condition before a preset threshold, e.g., a pre-alarm condition, is crossed. When an appropriate profile has been detected by the circuit, the sampling rate is increased.[4] In other words, *Tice* discloses a circuit wherein data is sampled at a two different sampling rates.

Accordingly, the circuit disclosed in *Tice* is a monitoring circuit that changes a sampling rate based on a possible alarm condition. As was noted above, claim 4 does not relate to a variable sample rate. Claims 4 and 15 relate to a device/method in which a buffer circuit stores received data at a first data rate, but data is released from the buffer at a second data rate. Nowhere does *Tice* teach or suggest a buffer circuit that stores a portion of a data frame at a first data rate and releases a portion to the receiver at a second data rate slower than the first, wherein the buffer circuit releases samples at a slower sampling rate during a training sequence of the frame data and releases samples at the first data rate during a data portion of the frame of data, as recited in claim 4 of the present application.

Furthermore, *Tice* does not teach or suggest adjusting the sampling rate based on the training sequence of the frame of data versus the data portion of the frame of data. As is discussed above, claims 4 and 15 recite releasing samples from the buffer circuit at a rate which is slower than the received data sampling rate during the training sequence in order to provide the receiver more time to determine the filter coefficients. The invention then increases the rate at which samples are released from the buffer circuit in order to process the data portion of the data frame.

With respect to the Examiner's contention that there is no criticality in increasing or decreasing the output sampling frequency of the sample rate converter depending on the type of data, Applicant directs the Examiner to page 9, lines 9-21 of the present application. Following is a summary of the cited portion.

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[4] Column 4, lines 9-19 of Tice

When operating in the HPNA 2.0 environment, large and costly signal processing circuits which require substantial power typically are required. The sample management buffer 36, by buffering the samples and releasing at the slower sampling frequency, operates to reduce the sampling frequency and corresponding data rate input to the equalizer, thus increasing the duration of time of the training sequence during which time the coefficients are calculated. As such, fewer operations per second are required which enables for receiver designs with cheaper and less complex circuits and/or slower circuits which consume less power.

Clearly, decreasing and increasing the output of the release circuit 38 is germane to the invention, and the Examiner's contention with respect to the criticality of increasing or decreasing the output sampling frequency is without merit.

Accordingly, withdrawal of the rejection of claims 4 and 15 is respectfully requested.

II. REMAINING REJECTIONS

Claims 5-7 and 16-18 stand rejected based on *AAPA*, *Lin*, *Fertner* and *Tice*, further in view of *Liu et al.* and *Duan*. As the remaining claims are dependent from either claim 4 or claim 15, the claims may be distinguished for at least the reasons stated above. *Liu et al.* and *Duan* do not make up for the above-discussed deficiencies. Withdrawal of the rejections is respectfully requested.

III. CONCLUSION

Accordingly, all claims are believed to be allowable and the application is believed to be in condition for allowance. A prompt action to such end is earnestly solicited.

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Should the Examiner feel that a telephone interview would be helpful to facilitate favorable prosecution of the above-identified application, the Examiner is invited to contact the undersigned at the telephone number provided below.

Should a petition for an extension of time be necessary for the timely reply to the outstanding Office Action (or if such a petition has been made and an additional extension is necessary), petition is hereby made and the Commissioner is authorized to charge any fees (including additional claim fees) to Deposit Account No. 18-0988.

Respectfully submitted,

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